	Application No.	Applicant(s)
Notice of Allowability	10/713,717	WILLIAMS, ANTHONY DAVID
	Examiner	Art Unit
	Linh M. Nguyen	2816
	Linn IVI. Nguyen	2010
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>amendment filed 10/14/05.</u>		
2. The allowed claim(s) is/are <u>2-16 and 18-20.</u>		
3. ☐ Acknowledgment is made of a claim for foreign priority unapprint a) ☐ All b) ☐ Some* c) ☐ None of the:		or (f).
1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)). * Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 ☐ Notice of In	formal Patent Application (PTO-152)
Notice of Preferences Cited (PTO-032) Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),
	Paper No./	/Mail Date
 Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 	8), 7. \square Examiner's	Amendment/Comment
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛭 Examiner's	Statement of Reasons for Allowance
of Biological Material	9. 🗌 Other	

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DETAILED ACTION

This is a reply to the Applicant's amendment submitted on 10/14/2005. According to this amendment, claims 2-16 and 18-20 are currently presented in the instant application.

Allowable Subject Matter

1. Claims 2-16 and 18-20 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The closest prior art fails to disclose or fairly suggest:

- a) A frequency synthesizer including an auxiliary digital frequency detector having an output terminal coupled to a second input terminal of the loop filter, in combination with the remaining claimed limitations, as called for in independent claim 2; or
- b) A frequency synthesizer including means, coupled to a second input terminal of the loop filter, for making the analog mixer phase detector automatically acquire phase lock when the phase locked loop is out of lock, in combination with the remaining claimed limitations, as called for in independent claim 16; or
- c) A frequency synthesizer, in which the current provided to the timing capacitor of the loop filter is provided from an integrator circuit responsive to an output signal from an auxiliary digital frequency detector whose output signal is related to a phase difference between an output signal of a programmable divider and a reference signal supplied to the auxiliary digital frequency detector, and the programmable divider is responsive to an output signal of the frequency synthesizer, in combination with the remaining claimed limitations, as called for in independent claim 19.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749.

The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen Primary Examiner Art Unit 2816

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